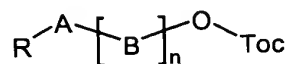


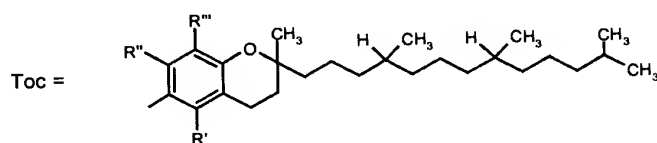
## Claims:

1. Chemical compounds in the form of their racemates, enantiomers or diastereomers with general formula I



(I)

in which R stands for the unchanged portion of a variable pharmaceutical active ingredient molecule, B stands for a spacer, and Toc with the formula



and R', R'' and R''' are equal to H or methyl stands for tocopherol and A stands for C=X, SO<sub>m</sub>, X or CH<sub>2</sub>, whereby X is equal to O, S or NR<sup>1</sup> (when n ≥ 1) or S or NR<sup>1</sup> (when n = 0), and B means a grouping X-R<sup>2</sup>-Y with Y equal to C=X, SO<sub>m</sub> or C(XR<sup>3</sup>)R<sup>4</sup>, and n is equal to 0 to 6, preferably 0, 1, 2 or 3, and m stands for 1 or 2, whereby R<sup>1</sup> stands for H, C<sub>1</sub> to C<sub>10</sub>-alkyl, preferably C<sub>1</sub> to C<sub>6</sub>-alkyl or aryl, Het or an aryl or Het radical that is bonded via a C<sub>1</sub> to C<sub>6</sub>-spacer, preferably C<sub>1</sub> to C<sub>3</sub>, and whereby R<sup>2</sup> is selected from the group alkylene, arylene or Het spacers as well as combinations thereof, whereby the latter are linked to one another either directly or via radical A or via grouping X<sub>o</sub>-A-X<sub>p</sub>, whereby o and p are equal to 0, 1 or 2, and the latter can be the same or different, and whereby R<sup>3</sup> and R<sup>4</sup> stand for H, C<sub>1</sub> to C<sub>10</sub>-alkyl, preferably C<sub>1</sub>-C<sub>6</sub>-alkyl or aryl, Het or an aryl or Het radical that is bonded via a C<sub>1</sub> to C<sub>6</sub> spacer, preferably C<sub>1</sub> to C<sub>3</sub>-spacers.

2. Compound of general formula I according to claim 1, in which R-A for A equal to C=O refers to an acyl radical of a pharmaceutical active ingredient from the group of the non-steroidal anti-inflammatory agents.

3. Compound according to claim 2, in which R-A for A equal to C=O represents an acyl radical of a non-steroidal anti-inflammatory agent that is selected from the group of acetylsalicylic acid, diclofenic acid, ibuprofen, indomethacin, ketoprofen, mefenamic acid, naproxen as well as derivatives thereof, especially reduction products of indomethacin as well as of ketoprofen.

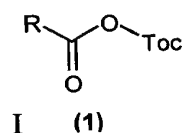
4. Chemical compound of general formula I according to claim 1, in which radicals  $R^1$ ,  $R^2$ ,  $R^3$ , and  $R^4$  are selected from the group of hydrocarbons that are unbranched, branched or cyclic, saturated or partially unsaturated with double and/or triple bond(s), unsubstituted or substituted in at least one place, preferably with F, Cl, Br, CN,  $NO_2$ ,  $NR^6R^7$ , CHO,  $SO_{\text{malkyl}}$ ,  $OR^6$ ,  $COR^6$ ,  $COOR^6$ ,  $COCOR^6$ , as well as  $CONR^6R^7$ .

5. Chemical compound of general formula I according to claim 1, in which the aryl radical is selected from the group of phenyl radicals that are unsubstituted or are substituted in at least one place, preferably with F, Cl, Br, CN, alkyl,  $CF_3$ ,  $NO_2$ ,  $NR^6R^7$ , CHO,  $SO_{\text{malkyl}}$ , OH,  $OR^6$ ,  $COR^6$ ,  $COOR^6$ ,  $COCOR^6$ ,  $CONR^6R^7$ , or  $CSNR^6R^7$  or are aryl- or Het-substituted, whereby the phenyl radical is optionally condensed with other cyclic compounds.

6. Chemical compounds of general formula I, whereby the alkyl or aryl radicals have the meaning according to claim 4 and/or 5, characterized in that radicals  $R^6$  and  $R^7$  stand for H,  $C_1$  to  $C_{10}$ -alkyl, aryl, heteroaryl or for a  $C_1$  to  $C_6$ -spacer-bonded aryl or heteroaryl radical.

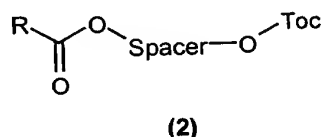
7. Chemical compound of general formula I according to claim 1 with a substitution according to one of claims 2 to 6, wherein the Het radical represents a compound that is selected from the group of saturated, unsaturated or aromatic monocyclic or bicyclic heterocyclic compounds with 5 to 10 ring members as well as at least one heteroatom, preferably nitrogen, oxygen and/or sulfur, whereby optionally the heterocyclic compound is fused to another carbocyclic compound or heterocyclic compound.

8. Chemical compounds in the form of their racemates, enantiomers or diastereomers with general formula I (1)



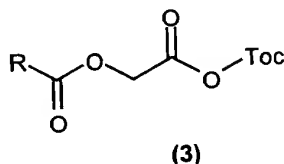
in which R and Toc have the meaning according to one of claims 1 to 7.

9. Chemical compounds in the form of their racemates, enantiomers or diastereomers with general formula I (2)



in which R, spacer, as well as Toc have the meaning according to one of claims 1 to 7.

10. Chemical compounds in the form of their racemates, enantiomers or diastereomers of general formula I (3)



in which R and Toc have the meaning according to one of claims 1 to 7.

11. Carrier-linked prodrugs for non-steroidal anti-inflammatory agents and tocopherol containing at least one chemical compound according to one of claims 1 to 10 in isolated form or as a physiologically harmless salt and/or solvate.

12. Combined bioprecursor-carrier prodrugs containing at least one chemical compound according to one of claims 1 to 10 in isolated form or as a physiologically harmless salt and/or solvate.

13. Combined bioprecursor-carrier prodrugs according to claim 12, wherein one or more additional derivatizations are performed on pharmaceutically active radical R or on the tocopherol radical.

14. Process for the production of a combined bioprecursor-carrier prodrug according to claim 12 or 13, wherein the function that is characteristic of the bioprecursor is introduced by reduction reaction.

15. Pharmaceutical agent containing at least one chemical compound according to one of claims 1 to 10 in isolated form or as a physiologically harmless salt and/or solvate.

16. Process for the production of a pharmaceutical agent according to claim 15, wherein at least one chemical compound according to one of claims 1 to 10 in isolated form and/or in the form of the corresponding physiologically harmless salt and/or solvate is mixed with additives that are common in pharmaceuticals.

17. Use of a chemical compound according to one of claims 1 to 10 in isolated form or in the form of the corresponding physiologically harmless salts and/or solvates for the production of pharmaceutical agents for treatment or prophylaxis of degenerative diseases of the central nervous systems, such as Alzheimer's disease, Lewy body

dementia, Parkinson's disease, Huntington's disease (chorea), multisystem atrophy and other similar diseases.

18. Use of a chemical compound according to one of claims 1 to 10 in isolated form or in the form of the corresponding physiologically harmless salts and/or solvates for the production of pharmaceutical agents for treatment of pain conditions or inflammation reactions, in particular for long-term therapy of chronic conditions.

19. Use of a chemical compound according to one of claims 1 to 10 in isolated form or in the form of corresponding physiologically harmless salts and/or solvates for the production of pharmaceutical agents that can be administered in a peroral, transdermal, transmucosal, rectal, inhalational, or intracerebroventricular manner.

20. Use of a chemical compound according to one of claims 1 to 10 in isolated form or in the form of the corresponding physiologically harmless salts and/or solvates for the production of pharmaceutical agent administration forms that are suitable for implants and/or injections and/or infusions.